

devotion of his mental powers to demonstrative reasoning, or to physical phenomena, and the inductions derived from these. It is not now necessary to argue how utterly false is the supposed connexion as cause and effect between such speculations and infidelity; for the passage which has been cited shews that in the present case even the presumed cause was not present; it was not only inactive, but actually non-existent. Halley's mind had been directed, not only to physical, but to metaphysical and moral science. His reasoning powers were practised, not only in demonstrative, but in moral and contingent evidence.

"Nor is this passage from Browne the only evidence to this fact. An analysis of the Aristotelian *Ethics* carefully drawn out in Halley's own handwriting, is in existence, preserved in Lord Macclesfield's library, at Shirburn castle; bound up with it, is also a treatise on logic. I have not yet had an opportunity of examining this, but, knowing how logic was taught at that period, I think it very likely that the tract may shew him to have been well acquainted with dialectical science, or the logic of contingent, no less than that of necessary truth. Much, however, may be inferred from what I am able to state positively; and, trusting that it may be of interest to yourself and some members of the Society, —I remain, dear sir, &c.

"STEPHEN JORDAN RIGAUD."

III. A Description of the Observatory of the College of Georgetown, near Washington, in the United States of America, by James Curley, Esq. Communicated by W. Simms, Esq.

"The Observatory of Georgetown College is situated a short distance from the banks of the Potomac River, 160 feet above high-water mark; it commands an extensive view of Washington and the neighbouring country, and is in sight of, and one and a half miles distant N.W. of, the Naval Observatory recently erected by our government. The house fronts the south, is 60 feet long, and about 30 feet wide, has 3 rooms on the ground-floor, of which the east and west, designed for meridian instruments, are 15 feet in height; the central part of the building is 30 feet square, running up two stories, each 15 feet in height, and appropriately surmounted with a moveable hemispherical dome 20 feet in diameter.

"In the western room we have lately mounted a transit telescope, having a $4\frac{1}{2}$ inch object-glass of 76 inch focal length, and made in the most approved manner by Ertel and Son, of Munich. A sidereal clock by R. Molyneux is in the same room.

"The eastern room is ready for a meridian circle, which Mr. Simms, of London, has in hand; the circles will be 46 inches in diameter, and the telescope 5 feet in length.

"The room formed by the dome will be occupied by an equatorial refractor, now being made by Gambey, of Paris; it has an object-glass of 7 French inches in diameter, and of about 10 feet focal length; the hour and declination circles are 16 and 20 inches in diameter, the latter reading to 10 seconds of space, and the former to 4 seconds of time. This instrument will rest on a solid

pier of masonry 40 feet high, 11 feet square at the base, and 6 at the top, and capped with heavy slabs of freestone.

“ Besides these, there are some smaller instruments, and a good mean-time chronometer by R. Molyneux : another sidereal clock is daily expected from London. We desire and hope, in time, to obtain what is necessary to make the establishment complete.”

IV. Communications respecting the Great Comet of 1845.

1. Estimated Positions of the Comet made at Nevis in the West Indies. By George Webbe, Esq. Communicated in a letter to the Secretaries.

“ *Nevis, West Indies, Jan. 12, 1845.*

“ On the evening of Sunday, the 5th instant, a large and very brilliant comet became visible here at sunset, having then first emerged from the solar rays.

“ On the evening of Monday, the 6th, I first observed it ; but being unprovided with any instrument mounted equatorially, and, indeed, having no instruments at all prepared for observation, in consequence of a change of residence, I was constrained to be satisfied with such estimated values of its position as I could best obtain. On the evening of the 6th, its near approach to δ^1 and δ^2 *Gruis* enabled me to lay down a telescopic triangle by estimation, by which I succeeded in obtaining an approximation to its place, which probably was not very erroneous. On the 7th, 8th, and 10th, I was not so fortunate, and was obliged to be satisfied with estimating its position by eye, in reference to β , θ , and ι *Gruis*. On the 9th, from its proximity to θ , I had an opportunity of making a better estimate. On the 11th, the clouds prevented any observation.

“ Although this comet will bear no comparison with the magnificent one of 1843, it is yet a very splendid object. The nucleus is large, and rather suddenly condensed, but indicates nothing like a defined termination. The tail appears homogeneous, undivided, and straight, and at present seems to be about 10° in length. From recollection, I should say, that the general appearance of this comet is fully as imposing as that of Halley’s in its most brilliant condition, if not more so.

Deduced Positions of the Comet.

Day.	Right Ascension.	South Declination.
d h m	h m	o /
Jan. 6 7	22 21.5	44 44
7 7 15	22 35.5	44 32
8 7	22 47.5	44 22
9 7 30	22 58	44 10
10 8	23 7	43 52

2. Results of Sextant Observations of Distances of the Comet from known Stars. By W. H. Simms, Esq. Extracted from a letter to W. Simms, Esq., and communicated by him.